

GENERAL PERMIT FOR ALTERATION AND RESTORATION OF INTERMITTENT STREAMS ASSOCIATED WITH MINING

This general permit allows alteration of ephemeral and intermittent streams associated with surface mining activities in the Cumberland Mountain and Cumberland Plateau ecoregions in Tennessee. The Department has determined that upper watersheds within these ecoregions meet criteria that affords mitigation in the form of restoration of the ephemeral stream reaches and conversion of intermittent reaches to emergent marsh wetlands that would support use classifications as waters of the state.

This general permit is intended to provide the mining industry with a planning tool and to provide long-term restoration of watersheds that range in size from 0-60 acres. This permit provides a mechanism for the establishment of aquatic habitats through the conversion of existing sediment control structures to an emergent marsh area that includes establishment of aquatic habitats and riparian zones as mitigation. The restoration plan must provide surface drainage continuity to the downstream, unmined reach. The approved mitigation plan must be completed as a post-mining or reclamation condition.

Alteration of ephemeral and intermittent streams within the Cumberland Mountain and Cumberland Plateau ecoregions is hereby permitted provided the activity is completed in accordance with the terms and conditions below.

Exclusions

This general permit cannot be used to authorize work in the following circumstances:

- (a) where wetlands will be adversely affected by the proposed work;
- (b) when the activity is located in any waterway which is identified by the Department as having contaminated sediments, and where the proposed work will likely mobilize the contaminants;
- (c) where the activity is located in a component of the National Wild and Scenic River System, a State Scenic River, or waters designated as Outstanding National Resource Waters;
- (d) when the project will adversely affect a species formally listed on State or Federal lists of threatened or endangered species; or
- (e) when an individual permit is required.

Alterations of ephemeral and intermittent streams associated with surface mining activities in the Cumberland Mountain and Cumberland Plateau ecoregions not qualifying for authorization by this general permit may be authorized by individual permit provided all requirements of the *Tennessee Water Quality Control Act of 1977* are met.

Notification

- 1) The applicant shall apply for coverage to the Division by submitting an original, signed application which includes the following minimum information:
 - (a) a map showing the exact location of the proposed work; and
 - (b) a single copy of construction plans and which includes all dimensions and specifications for the proposed work including all items outlined below.
- 2) The applicant must have submitted an application for a coal mine permit issued by the Federal Office of Surface Mining and/or an NPDES permit issued by the Department. These permit numbers must be provided on the application.

- 3) The notification must include pre-mining conditions and information and post-mining aquatic conditions.
- 4) The applicant may use maps from the SMCRA or NPDES permit applications to indicate the location of the proposed target watershed(s) and for pond design information.
- 5) The mitigation for the impacted aquatic resource will consist of a marsh/wetland area with the size calculated by measuring the stream length proposed for alteration (both the blue line and the dashed line) from the applicable USGS quadrangle map and multiplying that length by the bankfull stage stream width at the lowest point of the proposed disturbance. The square footage of water surface calculated in this manner is the area that must be mitigated at a 3:1 ratio.
- 6) Hydrology sources must be identified and must include both primary (surface run-off) and secondary (ground water) sources. Any hydrology model runs with discharge calculations to support water budgets should be included. Groundwater sources may be "French drain" outlets with estimated discharge volumes.
- 7) The applicant must include sediment basin design plans that include the plan view and cross sections with spillway elevations to sustain a maximum depth of four feet and side slope depth of 18" to 0". (Basin geometry may require minor cut and fill areas to achieve the desired elevations when the basins are created from the existing sediment control structures.)
- 8) Construction shall not commence until the Division issues written notification that the proposal may proceed in accordance with the terms of this general permit, or issues an individual permit.

General Terms and Conditions

- 1) Prior authorization must be obtained by the applicant pursuant to applicable provisions of §404 of the *Clean Water Act* and §26a of *The Tennessee Valley Authority Act*.
- 2) The wetland / marsh area must provide aquatic habitat enhancements such as logs and rock piles.
- 3) Native tree and shrub species must be planted adjacent and contiguous to the fringe emergent wetland including inlet channels. This riparian zone should be planted on ten foot centers with twelve foot rows and should extend fifty feet from wetted edge. Tree composition should include at least 50% hard mast. Light seeded species should be avoided.
- 4) The channel below the wetland must be constructed to replicate the pre-existing condition or return the drainway to a more natural condition in terms of shape and substrate.
- 5) All materials, construction debris, and other wastes shall be removed to an upland site and disposed in such a manner as to prevent the materials from entering the watercourse down stream from the work site.
- 6) All materials to be discharged or placed within the waterway below the ordinary high water level must be free of pollutants, contaminants, toxic materials, trash, creosote treated timbers, or other wastes as defined by T.C.A. 69-3-103(18).
- 7) Adverse impact to formally listed state or federal threatened or endangered species or their critical habitat, or to cultural, historical, or archeological features or sites is prohibited.
- 8) The applicant must contact the Division at the completion of the project milestones and upon completion of the project.

Effective Date July 1, 2000
Expiration Date June 30, 2005

APPROVED: _____
Paul Davis, Director